



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,671	03/18/2004	Timothy G. Offerle	81095823FGT1905	2670
28549	7590	05/25/2007		
ARTZ & ARTZ, P.C. 28333 TELEGRAPH ROAD, SUITE 250 SOUTHFIELD, MI 48034			EXAMINER TO, TUAN C	
			ART UNIT 3663	PAPER NUMBER
			MAIL DATE 05/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/708,671	Applicant(s) OFFERLE ET AL.	
	Examiner Tuan C. To	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-14 and 27-35 is/are pending in the application.
- 4a) Of the above claim(s) 2-14 and 33-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

The indicated allowability of claim 28 is withdrawn in view of the newly discovered reference(s) to Spillane et al. (US 20030200016A1). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 27 and 32 are rejected under 35 U.S.C. 102 (a) as being anticipated by Tanaka et al. (US 20030156045A1).

Regarding claim 27, Tanaka et al. directs to a system/method of controlling an automotive vehicle comprising: a shift lever having a reverse position generating a reverse position signal when associates with the parking assist ECU (2) (Tanaka et al., page 2, paragraph 0032; figure 1), the parking assist ECU (2) acts as a controller coupled to said shift lever, and the parking assist ECU (2) applying the automatic

Art Unit: 3663

steering and automatic braking when the parking assist control is ON (Tanaka et al., page 6, paragraph 0072 and paragraph 0069, lines 1-6).

As to claim 32, Tanaka et al. further discloses "a steering wheel angle sensor generating a steering wheel angle signal, said controller programmed to apply brake-steer in response to the reverse directional signal and the steering wheel angle signal (Tanaka et al., figure 1, steering angle sensor 9).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (US 20030156045A1) and in view of Spillane et al. (US 20030200016A1).

Tanaka does not disclose a transfer case having a transfer case mode, and said controller that controls to change the transfer case mode based on the braking system (50 and the steering system (40) (paragraph 0072).

Spillane et al. has been provided as teaching a vehicle control in which the transmission controller (30) (figure 1) controls the mode of the transfer case (21) (paragraph 0071).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system/method as taught by Tanaka et al. to include the teachings of Spillane et al. to control the distribution of drive torque between the front and rear axles, and the rear differential so as to control the distribution of drive torque between the two rear wheels.

The statements of intended use or field of use, "changing the transfer case mode based on brake-steer" clause is essentially method limitations or statements of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See In re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705; In re Finsterwalder, 168 USPQ 530; In re Casey, 512 USPQ 235; In re Otto, 136 USPQ 458; Ex parte Masham, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does: Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (US 20030156045A1) and in view of Ritz et al. (US 200200060103A1).

Regarding claim 29, Tanaka et al. fails to teach "controller is programmed to apply brake-steer by applying a first brake and second brake, one brake at a first wheel in order to reduce the turning radius of the vehicle.

The reference to Ritz et al. has been cited as teaching a vehicle, in which the control system is equipped with the controller (23) (Ritz et al., figure 1, control section 23) for activating steering-supporting braking torque (brake-steer) generated on the wheel inside the curve and a brake is applied to a first wheel (2_{HL}) (Ritz et al., figure 1, brake is applied to left rear wheel 2_{HL}; page 3, paragraph 0031). The first brake is applied and also the second is applied (Ritz et al., page 2, paragraph 0017).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system/method as taught by Tanaka et al. to include the teachings of Ritz et al. in order to bring the vehicle driver a comfort of driving and a safety of moving when the vehicle is controlled to back up.

As to claim 30, Ritz et al. further teaches that the controller (23) is programmed to apply brake-steer by applying at least one brake at a first wheel to reduce a vehicle turning radius (Ritz et al., figure 1, paragraph 0031, braking is applied at the first wheel (2_{HL}) in order to reduce vehicle turning radius).

As to claim 31, neither Tanaka et al. Ritz et al. addresses the limitation "the control is programmed to apply brake-steer by applying an increased drive torque to a second wheel relative to the first wheel", however, while the reference to Ritz et al. teach the vehicle equipped with a controller (23), wherein said controller is inherently controlled to increase drive torque to a second wheel relative to the first wheel (Ritz et al., figure 1, the torque M_B of the front left wheel increased to compare with torque M_B of the rear left wheel).

Response to Arguments

Applicant's arguments filed 03/22/2007 have been fully considered but they are not persuasive.

Tanaka teaches a parking assist device and method for assisting parking. When the parking/assist mode is switched to ON, the shift lever (paragraph 0032) is put into the reverse range. This means a reverse position signal is generated when the shift lever is put into the reverse range. The ECU (2) is coupled to a plurality of elements including the shift lever. When the parking/assist mode is ON, the shift level put in the reverse range, the ECU (2) applies brake-steer in order to assist parking. As set forth in paragraph 0072, when the parking operation is executed, the automatic steering means and the automatic braking means are provided such that the driver can execute the

Art Unit: 3663

parking operation without executing a vehicle speed adjustment. This shows that when the parking/assist mode is started, a reverse position signal is generated, and the ECU (2) is provided in assisting parking by applying braking and steering.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, in view of Ritz et al., it would have been obvious for those skill in the art to modify the parking assist device and method of Tanaka et al by using applying first brake and second brake to reduce the turning radius of the vehicle in order to bring the vehicle driver a comfort of driving and a safety of moving when the vehicle is controlled to back up. The combination of Tanaka et al. and Ritz et al. is properly combined to suggest the claimed limitations.

According to that reasons, the application is now in a condition of final rejection.

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (571) 272-6985. The examiner can normally be reached on from 8:00AM to 5:00PM.

Art Unit: 3663

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner,

A handwritten signature in black ink, appearing to read 'Tuan C To', is written over a horizontal line.

Tuan C To

May 18, 2007